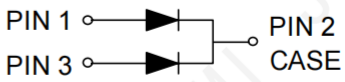
FEATURES

- Fred Chip Planar Construction
- SuperFast Switching,High Efficiency
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability



INTERNAL STRUCTURE

MECHANICAL DATA

- Case: TO-3P, Molded Plastic
- Terminals:Pure tin Plated ,Lead free Solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Weight: 5.1 grams(approx)
- Mounting Position:Any

Maximum Ratings and Electrical Characteristics @T_A=25℃ unless otherwise specified

Single Phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR8030PT		Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	300		V
Maximum RMS Voltage	V_{RMS}	210		V
Maximum DC Blocking Voltage	V_{DC}	300		V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	80		A
Peak Forward Surge Current : 8.3ms single half si ne-wave superimposed on rated load(JEDEC method)	I_{FSM}	450		A
Maximum Forward Voltage at 40A per leg	V_F	Typ.	Max.	V
		1.15	1.3	
Maximum Reverse Recovery Time (Measured With IF=0.5A, IR=1.0A,IRR=0.25A)	Trr	Typ.	Max.	nS
		45	50	
Maximum DC Reverse Current at TA =25℃ Rated DC Blocking Voltag TA =125℃	I_R	5 100		uA
Typical Thermal Resistance Junction to case	$R_{\theta JC}$	1.5		℃/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	45		℃/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150		℃

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

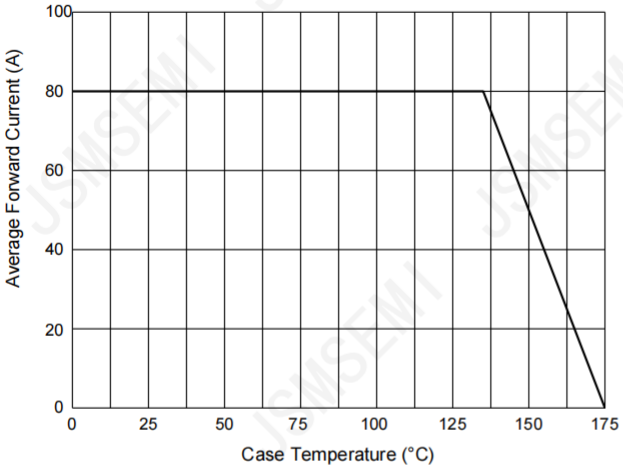


Fig. 2 - Typical Instantaneous Forward Characteristics

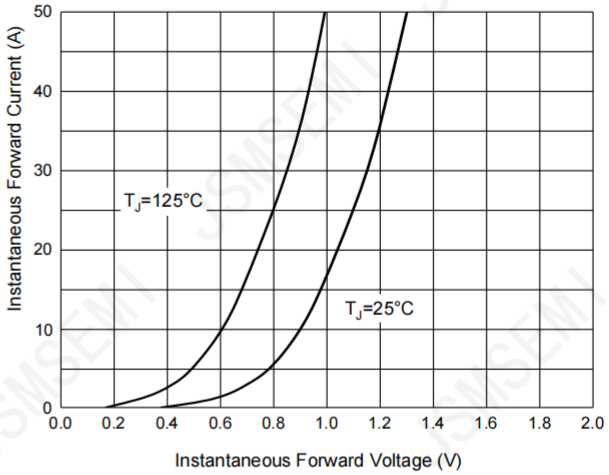


Fig. 3 - Typical Reverse Leakage Characteristics

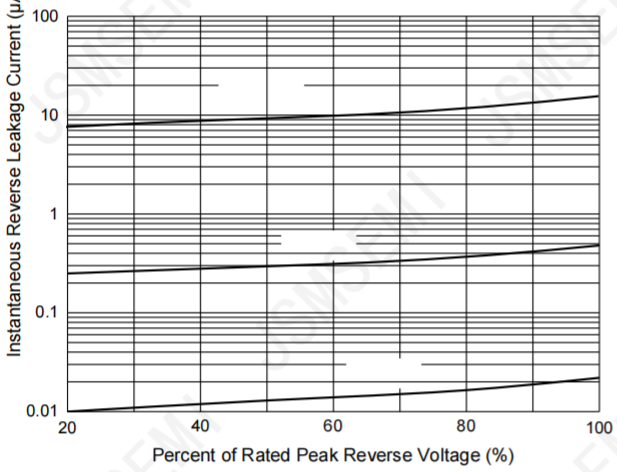
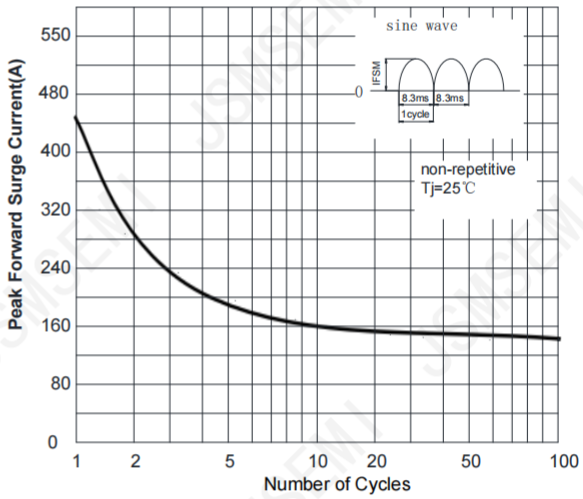
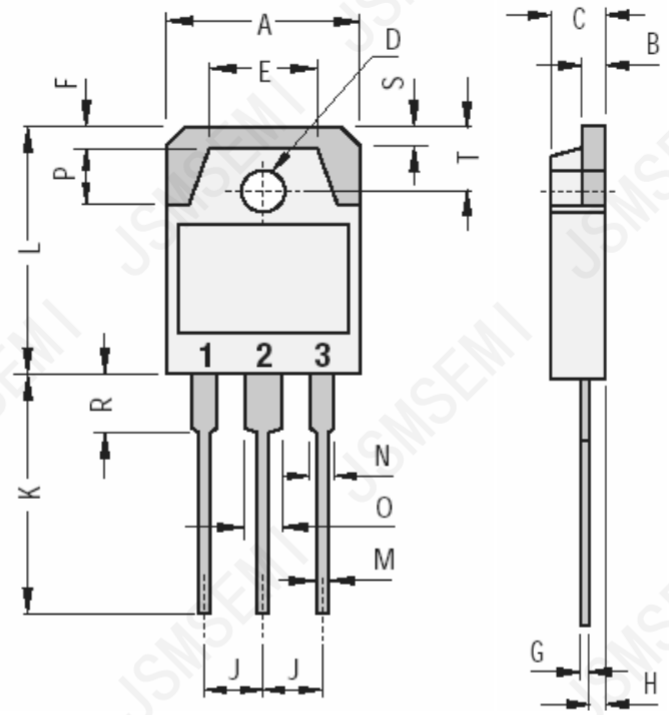


Fig.4 - Surge Forward Current Capability



TO-3P



DIM	Min	Max	DIM	Min	Max
A	15.20	16.00	K	20.00	
B	1.45	1.60	L	19.60	20.20
C	4.60	5.00	M	0.95	1.25
D	3.10	3.30	N		2.00
E		9.60	O		3.00
F		2	P		5.00
G	0.50	0.65	R		4.00
H		1.4	S		1.80
J	5.35	5.55	T	4.80	5.20

All Dimensions are in mm

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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